

Abstract

The cellular response to ultraviolet radiation exposure has been characterized
5 on the molecular level through the use of high density gene array technology. Nucleic
acid molecules and protein molecules, the expression of which are repressed or
induced in response to ultraviolet radiation exposure, are identified according to a
temporal pattern of altered expression post ultraviolet radiation exposure. Methods
are disclosed that utilized these ultraviolet radiation-regulated molecules as markers
10 for ultraviolet radiation exposure. Other screening methods of the invention are
designed for the identification of compounds that modulate the response of a cell to
ultraviolet radiation exposure. The invention also provides compositions useful for
drug screening or pharmaceutical purposes.

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